

THE MASSACHUSETTS STATE BUILDING CODE

meeting the requirements of 780 CMR 3107.6.3. Where solid walls or partitions are proposed below the base flood elevations, wall, framing and connection details of such walls shall be provided, including *loading* computations for the wall and foundation system used in meeting the conditions of 780 CMR 3107.6.2. The *construction documents* shall be accompanied by a statement bearing the signature of the *registered design professional* indicating that the design and proposed methods of construction are in accordance with all applicable provisions of 780 CMR 3107.6.

780 CMR 3108.0 RADIO AND TELEVISION TOWERS

3108.1 General: Subject to the structural provisions of 780 CMR 1611.0 for *wind loads* and the requirements of 780 CMR 1510.0 governing the fire-resistance ratings of buildings for the support of roof structures, all radio and television towers shall be designed and constructed as herein provided.

3108.2 Location and access: Towers shall be located and equipped with step bolts and ladders so as to provide ready access for inspection purposes. Guy wires or other accessories shall not cross or encroach upon any street or other public space, or over any electric power lines, or encroach upon any other privately owned property without *written* consent of the owner.

3108.3 Construction: All towers shall be constructed of approved corrosion-resistant noncombustible material. The minimum type of construction of isolated radio towers not more than 100 feet (30480 mm) in height shall be Type 4.

3108.4 Loads: Towers shall be designed to resist *wind loads* in accordance with EIA 222-E listed in *Appendix A*. Consideration shall be given to conditions involving *wind load* on ice-covered sections in localities subject to sustained freezing temperatures.

3108.4.1 Dead load: Towers shall be designed for the *dead load* plus the *ice load* in regions where ice formation occurs.

3108.4.2 Uplift: Adequate foundations and anchorage shall be provided to resist two times the calculated wind uplift.

3108.5 Grounding: All towers shall be permanently and effectively grounded.

780 CMR 3109.0 RADIO AND TELEVISION ANTENNAS

3109.1 Permits not required: A building permit is not required for roof installation of antennal structures not more than 12 feet (3658 mm) in height

for private radio or television reception. Such a structure shall not be erected so as to injure the roof covering, and when removed from the roof, the roof covering shall be repaired to maintain weather and water tightness. The installation of any antennal structure mounted on the roof of a building shall not be erected nearer to the *lot line* than the total height of the antennal structure above the roof, nor shall such structure be erected near electric power lines or encroach upon any street or other public space.

3109.2 Permits required: Approval shall be secured for all roof-mounted antennal structures more than 12 feet (3658 mm) in height above the roof. The application shall be accompanied by detailed drawings of the structure and methods of anchorage. All connections to the roof structure shall be properly flashed to maintain water tightness. The design and materials of construction shall comply with the requirements of 780 CMR 3108.3 for character, quality and minimum dimension.

3109.3 Dish antennas: An antenna consisting of a radiation element which transmits or receives radiation signals generated as electrical, light or sound energy, and supported by a structure with or without a reflective component to the radiating dish, usually in a circular shape with a parabolic curve design constructed of a solid or open mesh surface, shall be known as a dish antenna.

3109.3.1 Permits: The approval of the code official shall be secured for all dish antennal structures more than two feet (610 mm) in diameter erected on the roof of or attached to any building or structure. A permit is not required for dish antennas not more than two feet (610 mm) in diameter erected and maintained on the roof of any building.

3109.3.2 Structural provisions: Dish antennas larger than two feet (610 mm) in diameter shall be subject to the structural provisions of 780 CMR 1610.0, 1611.0 and 3108.4. The *snow load* provisions of 780 CMR 1610.0 shall not apply where the antenna has a heater to melt falling snow.

780 CMR 3110.0 WINDOW-CLEANING SAFEGUARDS

3110.1 General: All buildings and structures over 50 feet (15240 mm) or four stories in *height*, in which the windows are cleaned from the outside, shall be provided with anchors, belt terminals or other approved safety devices for all window openings. Such devices shall be of an approved design, and shall be constructed of corrosion-resistant materials securely attached to the window frames or anchored in the enclosure walls of the building. Cast-iron or cast-bronze anchors shall be prohibited.